

ABSTRACT

Provided is a method of forming a substrate with which a good-quality substrate having few cracks is obtained. On a growth base made of sapphire with a thickness of smaller than or equal to $100\mu\text{m}$, a GaN substrate is grown as heating the growth base, and cooling is provided therefor. At this time, the thickness of the substrate subject to growth is made larger than or equal to $200\mu\text{m}$ and the curvature thereof is made smaller than or equal to 0.03cm^{-1} , the curvature being caused by the difference in thermal expansion coefficients of the growth base and the substrate. Thus, even though the substrate is warped due to the cooling after the growth, occurrence of crack in the substrate is prevented and the good-quality substrate is obtained.

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